OAK RIDGE NATIONAL LABORATORY

MANAGED BY UT-BATTELLE FOR THE U.S. DEPARTMENT OF ENERGY

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Commissioning progress:

After finishing the retuning of the RFQ last week, beam commissioning continues to address two questions left: High power operation of DTL 1 into the D-plate beam stop. And: Addressing one of the DOE recommendations from last weeks review, to measure the effectiveness of the halo scrapers using the D-plate diagnostics.

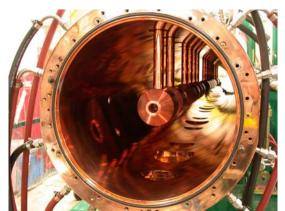
Retuning of the RFQ did not change beam properties as far as we can measure. Commissioning will end Nov 17th.

Overview:

The most important issue facing drift tube deliveries is the shrinkage of the DTL 2 drift tubes. Stretching the drift tubes was not further investigated after preliminary tests that showed no success and excessive force necessary to deform the drift tube. Electroplating of copper drift tubes of tank 2 DTs has already begun with test articles under way. Final machining follows. Nevertheless, the schedule impact as shown in the table below is 3-4 weeks and shows delivery not before Dec 23rd. Other minor issues (clogging of cooling channels in EMDs and PMQs) lead to some but not significant delays.

ORNL:

Seventeen DT's (out of a total of 27) have been installed in DTL-4. This is all that can be installed without blocking the installation of BPM/EMD DT's which will be delivered later this month. After installation of the remaining DT's, they will be aligned and the tank tuned. We plan to complete this work in December.



Drift Tubes Installed in DTL-4



DTL-5 Tank Leak Testing

				Tank 3					Tank 1		
Component	Engineer	<u>Identifier</u>	Quantity	Shipping Date	<u>Delivered</u>	Change from last week	<u>Identifier</u>	Quantity	Shipping Date	<u>Delivered</u>	Change from last week
Dummies	•		2	Complete	2			4	Complete	4	
EMDs	O'Hara		4	21-Nov-03	0	0		4	21-Nov-03	0	0
BPMs	O'Hara		2	21-Nov-03	0	0					
				Tank 4					Tank 5		
Component	Engineer	<u>Identifier</u>	Quantity	Shipping Date	Delivered	Change from last week	<u>Identifier</u>	Quantity	Shipping Date	Delivered	Change from last week
Drift Tubes	Gentzlinger	4A	7	Complete	7		5E	8	Complete	8	0
		4B	6	Complete	6		5F	7	Complete	7	0
		4C	6	Complete	6		5G	8	Complete	7	7
		4D	8	Complete	8						
Dummies	Gentzlinger										
EMDs	O'Hara		4	21-Nov-03	0			4	21-Nov-03	0	
BPMs	O'Hara		2	21-Nov-03	0			2	21-Nov-03	0	
Top hats	Rowton	1.25"	27	Complete	27	0	1.25"	23	Complete	23	
Shrouds	Rowton		27	Complete	27			23	Complete	23	
Endwalls	Turon		2	Complete	2			2	Complete	2	
Post Coupler Kits	Rowton		27	Bead Pull + 15	0			23	Bead Pull + 15	0	
Slug Tuners	Rowton		12	Bead Pull + 7	0			12	Bead Pull + 7	0	
Access Ports	Rowton		2	14-Nov-03	0			2	21-Nov-03	0	
RF Grills	Rowton		4	14-Nov-03	0			4	21-Nov-03	0	
Wave Guide-Iris			1	Complete	1	0		1	Complete	1	0
Window	Young		1	Complete	1	0		1	Complete	1	0
Stands	Turon		1	Complete	1			1	Complete	1	0
Milestones				Date					Date		

Milestones				Date					Date			
Ready for RF			?				?					
Ready for Beam				28-Feb-04					28-Feb-04			
Tank Commissioning complete				18-Aug-04					18-Aug-04			
				Tank 6			Tank 2					
Component	Engineer	Identifier	Quantity	Shipping Date	<u>Delivered</u>	Change from last week	<u>Identifier</u>	Quantity	Shipping Date	<u>Delivered</u>	Change from last week	
Drift Tubes	Gentzlinger	6H	10	10-Nov-03	0		2J	12	10-Dec-03	0		
		61	11	10-Nov-03	0		2K	12	10-Dec-03	0		
							2L	11	16-Dec-03	0		
							2M	8	23-Dec-03	0		
Dummies	Gentzlinger								None	0		
EMDs	O'Hara		4	21-Nov-03	0			4	21-Nov-03	0		
BPMs	O'Hara		2	21-Nov-03	0			2	21-Nov-03	0		
Top hats	Rowton	1.25"	21	10-Nov-03	0		.75"	41	10-Dec-03	0		
							1.00"	6	10-Dec-03			
Shrouds	Rowton		21	10-Nov-03	0			47	10-Dec-03	0		
Endwalls	Turon		2	Complete	2			2	Complete	2		
Post Coupler Kits	Rowton		21	Bead Pull + 15	0			27	Bead Pull + 15	0		
Slug Tuners	Rowton		12	Bead Pull + 7	0			12	Bead Pull + 7	0		
Access Ports	Rowton		2	21-Nov-03	0	•		1	21-Nov-03	0		
RF Grills	Rowton		4	21-Nov-03	0			4	21-Nov-03	0		
Wave Guide-Iris			1	Complete	1	0		1	Complete	1	0	
Window	Young		1	Complete	1	1		1	Complete	1	1	
Stands	Turon		1	Complete	1	0		1	Complete	1		

Date

?

30-Jan-04

1-Apr-04

Complete
Negotiating
Contract
Next 7 days
Overdue
Change

Guess

Date

?

28-Feb-04

18-Aug-04

Milestones Ready for RF

Ready for Beam Tank Commissioning complete